AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer-implemented system that facilitates determining presence of an object, comprising:

a transmit component that transmits a multicast-type message as a unicast message to the object, the object having a timeout period and a plurality of functions capable of independent presence indication associated therewith, the multicast-type message directed to a first set of one or more of the plurality of functions, the multicast-type message is of a type that is normally sent as a multicast datagram; ~~and~~

a presence component that monitors a response to the unicast message from the object, and if a response is not received, the object is presumed to be off-line with respect to the first set of one or more of the plurality of functions, the object is presumed to be on-line with respect to a second set of one or more of the plurality of functions, and the response is ~~substantially~~ similar [[as]] to that for a multicast message to the object;

and a processor configured to execute the transmit and presence components.

2. (Original) The system of claim 1, the object is at least one of a wired device, a wireless device, and a service.

3. (Original) The system of claim 1, the multicast-type message is transmitted in unicast at least once before the timeout period expires.

4. (Original) The system of claim 1, a plurality of the multicast-type messages are transmitted in unicast to the object to control the object.

5. (Original) The system of claim 4, the plurality of multicast-type messages signal the object to stay online.

6. (Previously Presented) The system of claim 1, at least one of the transmit component and the presence component is part of a client application that transmits the multicast-type message in unicast and receives the response in unicast from the object.

7. (Cancelled)

8. (Original) The system of claim 1, the unicast response is cached at the system-end.

9. (Original) The system of claim 1, the multicast-type message is directed to at least one of the object, an embedded device of the object, and an embedded service of the object.

10. (Cancelled)

11. (Original) The system of claim 1, the object is compatible with a plug-and-play architecture.

12. (Original) The system of claim 1, the transmit component transmits a plurality of unique multicast-type messages in unicast to a respective plurality of the objects.

13. (Original) The system of claim 1, the transmit component transmits a first multicast-type message in unicast to an intermediate device to determine its status before transmitting the multicast-type message in unicast to the object.

14. (Original) The system of claim 1, the multicast-type message is transmitted in unicast to the object from a first client application, the response to which indicates a status of the object, and the status of which is announced by the first client application to a second client application.

15. (Cancelled)

16. (Original) A computer readable medium having stored thereon computer executable instructions for carrying out the system of claim 1.

17-25. (Cancelled)

26. (Currently Amended) A computer-implemented method of determining the presence of an object on a network, comprising:

transmitting from a computer a multicast-type message in unicast to the object on demand;

checking for receipt by the computer of a response from the object to determine the status of the object; and

determining the status of the object based upon receipt or non-receipt of the response.

27. (Original) The method of claim 26, further comprising delaying determination of the status of the object until a predetermined number of additional multicast-type messages have been transmitted to the object in unicast.

28. (Original) The method of claim 26, further comprising initiating discovery of an intermediary object in response to determining initially that the object is off-line.

29. (Original) The method of claim 26, further comprising automatically initiating discovery of a redundant object in response to determining that the object is off-line.

30. (Original) The method of claim 26, the object is one of a plurality of interdependent objects such that failure of the object results in failure of the remaining plurality of interdependent objects.

31. (Original) The method of claim 30, plurality of interdependent objects are discovered according to a hierarchy such that the object is discovered before the remaining plurality of interdependent objects.

32. (Original) The method of claim 26, further comprising signaling the object to stay on-line using at least two of the multicast-type messages sent in unicast to the object.

33-36. (Cancelled)